

Claims

1. A fixation device for fixing a first member in a position relative to a second member, the fixation device including:
 - 5 (a) a shaft having a head and a longitudinal axis;
 - (b) a first screw portion rotatable about the axis; and
 - (c) a second screw portion rotatable about the axis independently of the first screw portion;
the first and second screw portions each having an external screw thread
- 10 in a first thread direction and configured to engage a bore formed in the first and second members.
2. A fixation device according to claim 1 wherein:
 - (a) the first screw portion is a collar screw;
 - 15 (b) the shaft includes an externally threaded portion; and
 - (c) the second screw portion includes a corresponding internal thread;
wherein assembly of the fixation device includes passing the shaft through the centre of the collar screw prior to threadedly engaging the second screw portion on the shaft.
- 20 3. A fixation device according to claim 2 further including a lock nut having an internal thread corresponding with the shaft thread, and configured to maintain the position of the second screw portion on the shaft.
- 25 4 A fixation device according to claim 1 wherein the first screw portion is a collar screw with an opening along its length for receiving a length of the shaft.
- 5 5 A fixation device according to claim 1 or claim 4 wherein the head includes an external screw thread in a second thread direction and the first screw portion includes a corresponding internal thread to facilitate assembly of
30 the fixation device by screwing the first screw portion over the head.
6. A fixation device according to claim 5 wherein the external screw thread of the head has a leading end and a trailing end and the trailing end terminates

in a flat end so as to substantially preclude engagement with a threaded member.

7. A fixation device according to claim 5 or claim 6 wherein the internal
5 thread of the first screw portion configured to engage the external thread of the
head has a leading end and a trailing end and the trailing end terminates in a
flat end so as to substantially preclude engagement with a threaded member.

8. A fixation device according to any one of the preceding claims wherein
10 the shaft is flexible.

9. A fixation device according to any one of the preceding claims wherein
the first and second members are bone.

15 10. A fixation device according to any one of the preceding claims further
including a retaining screw configured to engage the head, thereby retaining the
fixation device within the threaded bore.

11. A method of fixing a first member in a position relative to a second
20 member, the method including the steps of:

(a) assembling a fixation device;
(b) forming a bore in the first and second members;
(c) introducing the fixation device into the bore, the fixation device having:
25 (i) a shaft having head and a longitudinal axis;
(ii) a first screw portion rotatable about the axis; and
(iii) a second screw portion rotatable about the axis independently of
the first screw portion;

the first and second screw portions each having an external screw
thread adapted to engage the bore in the first and second members;

30 (d) operating the fixation device in such a way that one of the first or second
screw portions rotates relative to the threaded bore thereby positioning the first
member relative to the second member; and

(e) locking the fixation device in position.

12. A method according to claim 11 wherein the step of assembling the fixation device includes passing the shaft through the centre of the first screw prior to threadedly engaging the second screw portion on the shaft.

5 13. A method according to claim 11 wherein the first screw portion is a collar screw with an opening along its length for receiving a length of the shaft, and the step of assembling the fixation device includes passing the shaft through the length-wise opening of the first screw.

10 14. A method according to claim 11 wherein the head includes an external screw thread in a second thread direction and the first screw portion includes a corresponding internal thread, and the step of assembling the fixation device involves screwing the first screw portion over the head.